

REMARKS

Reconsideration and allowance of the subject application are respectfully requested. Claims 1-15 are pending in the application. Applicant respectfully submits that the pending claims define patentable subject matter.

Claims 7 and 13 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite because the Examiner asserts that these claims recite terms which do not have an antecedent basis. By this Amendment, Applicant has amendment claims 7 and 13 to improve clarity. Accordingly, the Examiner is requested to remove the § 112, second paragraph.

Claims 1-7, 10-13 and 15 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over Lyles et al. (U.S. Patent No. 5,917,822; hereafter “Lyles”) in view of Wallmeier (U.S. Patent No. 6,553,033). Claims 8, 9 and 14 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over Lyles in view of Wallmeier and Ding et al. (U.S. Patent No. 5,699,361; hereafter “Ding”). Applicant respectfully traverses the prior art rejections.

In response to the arguments for patentability in the August 19, 2005 Amendment, Examiner maintains that “[t]he applicant didn't claim the citation ‘a telecommunication system in which calls (effected by cells or packets) are made from terminals to a connection station’ in the body of the claims.” The Examiner also maintains that “[t]he applicant didn't claim the citation ‘the terminal equipment has a plurality of incoming connections’ in the body of the claims.” However, Applicant respectfully submits that the Examiner is incorrect.

Claim 1 recites “[a] telecommunication system comprising: a plurality of terminals which communicate with a base station or a connection station; and a management unit which

determines the allocation of resources for calls from each terminal to said connection station, wherein at least some of said terminals include a plurality of incoming connections providing cells or packets used to effect said calls to said connection station” Claim 7 recites “[a] terminal for a telecommunication system in which calls are effected by cells or packets, and the allocation of resources is determined cell by cell or packet by packet, said terminal comprising: a plurality of incoming connections providing the cells or the packets used to effect the calls to a connection station” Claim 13 recites “at least some of said terminals include a plurality of incoming connections providing the cells or the packets used to effect said calls to a connection station and means for allocating resources to each connection according to the overall resources allocated to said terminal by said management unit and a weighting coefficient allocated to each connection of said terminal, and said resources are allocated cell by cell or packet by packet”

The Examiner further responds by asserting that “Lyles does disclose a telecommunication system (see col.9, lines 35-60) in which requests [i.e., calls] (effected by cells or packets) are made from terminals to a connection station (see col.2, lines 9-15) and each terminal includes a plurality of connections (see fig.2, channels 200, 205, physical coax 120).” The Examiner also asserts that “Lyles does disclose that the terminal equipment has a plurality of incoming channels [i.e., connections] (see fig.2, channels 200, 205, physical coax 120) providing cells or packets used to effect the requests [i.e., calls] to the head-end controller [i.e., connection station] (see col.2, lines 3-14, col.6, lines 44-67, col.7, lines 1-6, 11, 12).” However, Applicant respectfully submits that the Examiner has misconstrued the disclosure of Lyles.

Lyles discloses the terminal equipment includes a plurality of channels, the virtual downstream channel 200 and virtual upstream channel 205 are channels multiplexed over a single physical coaxial transmission cable 120 (i.e., a single connection), between the terminal equipment 210 (i.e., a cable modem or personal computer or a television set-top box) and a head-end controller 105, which includes a single virtual downstream channel 200 and a single virtual upstream channel 205. That is, the virtual upstream (outgoing) channel and the downstream (incoming) channel are channels carried by the physical coaxial cable. Accordingly, Lyles does not teach or suggest that the terminal equipment has a plurality of incoming connections providing cells or packets used to effect said calls to said connection station. Lyles' terminal equipment only transmits data from a single source/connection, i.e., the data which is generated by the terminal equipment unit itself. For this reason, Lyles teaches that the bandwidth allocation unit / head-end controller (which the Examiner asserts corresponds to the claimed management unit), rather than the network access units / terminal equipment units (which the Examiner asserts corresponds to the claimed terminals), uses a weighted fair queuing algorithm or a virtual clock algorithm to generate a sequence of upstream slot/transmission assignment grants which the bandwidth allocation unit can transmit downstream to the requesting network access unit.

Thus, one of ordinary skill in the art would not have been motivated, based on the teachings of Wallmeier, to modify the terminal equipment of Lyles to include "means for allocating the resources to each connection according to the overall resources that are allocated to said terminal and a weighting coefficient allocated to each connection of said terminal", as

required by claims 1, 7 and 13. That is, there is absolutely no reason why one of ordinary skill in the art would have been motivated to modify Lyles' terminal equipment of to include "means for allocating the resources to each connection according to the overall resources that are allocated to said terminal and a weighting coefficient allocated to each connection of said terminal" since Lyles' terminal equipment includes only one incoming channel.

In response to the arguments for patentability in the August 19, 2005 Amendment, the Examiner states that Ding is relied upon "only for the teaching of the resource allocation signal that is received from the management unit represents a number of cells to be transmitted and the means for allocating resources to each connection select the connections that will be able to transmit a cell." However, the Examiner's response does not address why one of ordinary skill in the art would have been motivated to modify the network/method of Lyles based on the teachings of Ding to produce the claimed invention. Ding is directed to allocating internal channels of a host computer (i.e., a node) as needed by application programs running on a processor of the host computer. Accordingly, the resource allocation signal of Ding is transmitted by an application program to a (streamer) process running on the same host computer. On the other hand, Lyles teaches transmitting a transmission authorization request signal from a terminal unit to a head-end unit. Thus, Applicant respectfully submits that the teachings of Ding relied on by the Examiner are not in any way related or relevant to the system/method of Lyles or the present invention.

Accordingly, Applicant respectfully submits that independent claims 1, 7 and 13, as well as dependent claims 2-6, 8-12, 14 and 15, should be allowable over the cited references because

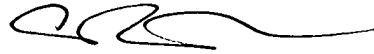
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the cited references, alone or in combination, do not teach or suggest all of the features of the claims, and one of ordinary skill in the art would not have been motivated to combine and modify the cited references to produce the claimed inventions.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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